IN THE SPECIFICATION

- Please amend the paragraph at page 20, line 17 to page 21, line 10, as follows:

Signal processing in mobile phones is typically conducted at baseband using in-phase (I) and quadrature (Q) signals. The Q signal is offset from the I signal by a phase shift of 90 degrees. To provide these two signals, an IF mixing signal (IF_{OUT}) 104 and a dual divide-by-two and quadrature shift block (÷2/90°) 120 may be utilized. Frequency synthesizer 100 generates an IF_{OUT} signal 104, for example at about 500 MHz, that is divided by 2 in block 120 to provide $IF_{OUT}/2$ mixing signals 119 and 121. Block 120 delays the signal 121 to mixer 122 by 90 degrees with respect to the signal 119 to mixer 124. Block 120 may be implemented with two flip-flop circuits operating off of opposite edges of the IF_{OUT} signal 104, such that the output of the flip-flops are half the frequency of the IF_{OUT} signal 104, and are 90 degrees offset from each other. The resulting output signals 123 and 125 have two frequency components represented by $|IF + IF_{OUT}/2|$ and $|IF - IF_{OUT}/2|$. The latter frequency component is the desired one and is typically selected such that the baseband signal is centered at DC (f = 0 Hz). Assuming the baseband frequency is centered at DC, the $|IF - IF_{OUT}/2|$ signal is selected using low-pass filters 126 and 128. The resulting baseband signal 123 is the Q signal, and the resulting baseband signal 125 is the I signal. These signals 123 and 125 may be further processed at baseband by processing block 130 and provided to the rest of the mobile phone circuitry as IQ and QI signals 131 and 132.

- Please amend the paragraph at page 34, line 21 to page 35, line 11, as follows (replace "L_{OUT}" with "L_{EXT}"):

In one exemplary embodiment, induction loop circuits 3208 and 3210 may be employed as on-package inductors, for example replacing (~~L_{OUT}~~L_{EXT}) 302 in VCO 400 of FIG. 3. In this capacity, one or more LC tank oscillator circuits may be used in a frequency synthesizer used to produce an output frequency (f_{OUT}) for mixing with one or more RF signals (*e.g.*, 900 MHz or 1800 MHz signals), as described in relation to the circuitry of FIGS. 1-4. For example, in one exemplary embodiment induction loop circuits 3208 and 3210 may be provided for band selection purposes, with one loop corresponding to an LC tank oscillator circuit used in a

frequency synthesizer used to produce an output frequency (f_{OUT}) for mixing with an RF signal of 900 MHz and the other loop corresponding to an LC tank oscillator circuit used in a frequency synthesizer used to produce an output frequency (f_{OUT}) for mixing with an RF signal of 1800 MHz. These signal frequencies are exemplary only, and it will be understood by those of skill in the art with benefit of this disclosure that the method and apparatus disclosed herein may be employed in the production of signals having virtually any frequency desired, and/or for mixing with either RF or IF signals.

- Please amend the paragraph at page 45, lines 12-19, as follows:

One may connect in-package (wire bond) inductors or induction circuits in series, parallel, or a combination of series and parallel, to obtain a wide variety of inductor topologies and arrangements. FIG. 12 shows an electrical schematic of a wire bond induction loop circuit. The schematic includes inductor 5005 (*L*), pad 5010, and pad 5012. One terminal of inductor 5005 couples to pad 5010, whereas a second terminal of inductor 5005 couples to pad 5012. One may realize inductor 5005 as the parallel combination of two inductors. In other words, ~~from the~~ one may couple two inductors in parallel such that the inductance between the two resulting terminals of the parallel combination equals the inductance of inductor 5005.

- Please amend the paragraph at page 49, line 19 to page 50, line 2, as follows:

The package 3200 includes induction loop circuits 3208 and 3210, which correspond to inductors 5020 and 5025, respectively. Induction loop 3208 includes inductor circuit wire bonds 3206A and 3206B, which correspond, respectively, to inductor segments 5020A and 5020B. Similarly, induction loop ~~3208~~3210 includes inductor circuit wire bonds 3206C and 3206D that represent inductor segments 5025A and 5025B, respectively. Integrated circuit inductor circuit bonding pads 3104A-3104D represent pads 5015A-5015D, respectively. Package substrate inductor circuit bonding pads 3204A-3204B correspond, respectively, to pads 5010A-5010B.

- Please amend the paragraph at page 51, line 19 to page 52, line 5, as follows:

Induction loop 3208 includes inductor circuit wire bonds 3206A and 3206B and conductive inductor circuit connection feature 3500A (not shown explicitly), which correspond,

respectively, to inductor segments 5020A, 5020B, and 5020C. Conductive inductor circuit connection feature 3500A couples one of individual substrate inductor circuit bonding pads 3204A1 to one of individual substrate inductor circuit bonding pads 3204A2. Similarly, induction loop ~~3208~~3210 includes inductor circuit wire bonds 3206C and 3206D and conductive inductor circuit connection feature 3500B (not shown explicitly) that represent inductor segments 5025A, 5025B, and 5025C, respectively. Conductive inductor circuit connection feature 3500B couples one of individual substrate inductor circuit bonding pads 3204B1 to one of individual substrate inductor circuit bonding pads 3204B2.

- Please amend the paragraph at page 56, lines 13-17, as follows:

The embodiment in FIG. 22 includes induction loop circuits 4208 and 4210. The embodiment in FIG. 22 further includes substrate bonding pads 4202 and inductor circuit substrate bonding pads ~~4202C-4202E~~4204C-4204E. Selective or strategic placement of integrated circuit solder bumps 4102C-4102E and inductor circuit solder bump connectors 4104C-4104E allows implementation of parallel induction loop circuits 4208 and 4210 with desired inductance values.

- Please amend the paragraph at page 62, lines 4-10, as follows:

To further improve the symmetry between the parallel inductors, one may use as symmetrical of an arrangement, configuration, materials, geometry, and the like, of leads 5032 and 5034, as possible in a given application. For example, one may use overlapping circuit traces on two metal layers of an integrated circuit and connections through vias to implement symmetric leads that couple the inductors in parallel and to the differential amplifier. Of course, depending on the application, one may use other implementations of the leads, as persons of ordinary skill in the art who have the benefit of the description of the invention understand.